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## MEK1 (D2R1O) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IHC-P	H M R Mk	Endogenous	45	Rabbit IgG	#Q02750	5604

<b>Product Usage Information</b>	<b>Application</b> Western Blotting Immunohistochemistry (Paraffin)	<b>Dilution</b> 1:1000 1:250
<b>Storage</b>	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.  For a carrier free (BSA and azide free) version of this product see product #45307.	
<b>Specificity / Sensitivity</b>	MEK1 (D2R1O) Rabbit mAb recognizes endogenous levels of total MEK1 protein. This antibody does not cross-react with MEK2 or other MAPK kinase proteins.	
<b>Species predicted to react based on 100% sequence homology:</b>	Bovine, Dog, Pig, Guinea Pig	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human MEK1 protein.	
<b>Background</b>	MEK1 and MEK2, also called MAPK or Erk kinases, are dual-specificity protein kinases that function in a mitogen activated protein kinase cascade controlling cell growth and differentiation (1-3). Activation of MEK1 and MEK2 occurs through phosphorylation of two serine residues at positions 217 and 221, located in the activation loop of subdomain VIII, by Raf-like molecules. MEK1/2 is activated by a wide variety of growth factors and cytokines and also by membrane depolarization and calcium influx (1-4). Constitutively active forms of MEK1/2 are sufficient for the transformation of NIH/3T3 cells or the differentiation of PC-12 cells (4). MEK activates p44 and p42 MAP kinase by phosphorylating both threonine and tyrosine residues at sites located within the activation loop of kinase subdomain VIII.	
<b>Background References</b>	1. Crews, C.M. et al. (1992) <i>Science</i> 258, 478-480. 2. Alessi, D.R. et al. (1994) <i>EMBO J.</i> 13, 1610-19. 3. Rosen, L.B. et al. (1994) <i>Neuron</i> 12, 1207-21. 4. Cowley, S. et al. (1994) <i>Cell</i> 77, 841-52.	

<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
<b>Western Blot Buffer</b>	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
<b>Applications Key</b>	<b>WB:</b> Western Blotting <b>IHC-P:</b> Immunohistochemistry (Paraffin)
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected

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